

AMENDMENTS

Figure 2B:

Preliminarily, Applicant thanks the Examiner for the telephonic conference of December 5, 2007. Per the telephonic conference of December 5, 2007 with the Examiner, Applicant submitted a proposed Amendment to Figure 2B to the Examiner via fax on December 12, 2007. The Amendment is intended to better represent the disclosure of the written specification in graphical form. No new matter has been added.

Referring now to the Amendment to Figure 2B, Applicant has added a dotted line between the Final Metal Containing Solution 236 and the dilute step 250. This line represents the "in combination with" language used in paragraph [0039] and described in the following Remarks. Applicant respectfully requests entry of the Amendment to Figure 2B attached hereto.

REMARKS

Applicant hereby submits a Request for Continued Examination and responds to the Final Office Action. In the Final Office Action, the Examiner rejected all pending claims 1-4, 6-10, and 19. In this Response, Applicant amends Figure 2B. Support for the Amendment is found in the originally-filed specification, claims, and figures. No new matter has been added. Upon entry of the foregoing Amendment, Applicant respectfully requests reconsideration of pending claims 1-4, 6-10, and 19 (2 independent claims, 10 claims total claims) in light of the following Remarks.

Claim Rejections under 35 U.S.C § 112, first paragraph

Claims 1-4 and 6-10

Claims 1-4 and 6-10 stand rejected under 35 U.S.C. § 112, first paragraph. Specifically, the Examiner asserts that in claim 1, the limitation of “adjusting the pH of said metal-bearing solution using chemical pH adjustment to form a pH-adjusted metal-bearing solution; c) diluting said pH-adjusted metal-bearing solution” is new matter. Applicant respectfully traverses herein.

As shown in the currently amended Figure 2B by the dotted line between the Final Metal Containing Solution 236 and the dilute step 250, Applicant submits that a dilution step and a chemical pH adjustment step is disclosed as being performed in series. In support of the amendment, Applicant directs the Examiner’s attention to the paragraphs [0038] and [0039]. Paragraph [0038] discloses adjusting the pH of a metal-bearing solution as seen in the following quotation:

Referring now to FIG. 2B, in order to optimize solution extraction of the copper, the pH of copper-containing solution 230 from solid-liquid phase separation step 228, in accordance with various aspects of this

embodiment of the present invention, preferably is adjusted to a pH of about 1 to about 2.2, more preferably to a pH of about 1.2 to about 2.0, and still more preferably to a pH of about 1.4 to about 1.8. This adjustment may be accomplished in a variety of manners. In accordance with one aspect of the present invention, copper-containing solution 230 is subjected to a chemical pH adjustment step 232, which optionally can be followed by further solid-liquid separation (step 234) to yield a final metal-containing solution 236 for solvent extraction. In such case, the residue 238 from step 234 can be impounded (step 240) or otherwise disposed of.

Paragraph [0039] discloses diluting the pH-adjusted metal bearing solution as seen in the following quotation:

Alternatively, or in combination with the method described above, the pH of copper-containing solution 230 may be adjusted through dilution (step 250). In contradistinction to the prior art methods that rely on significant dilution, in accordance with the present invention, when dilution is employed, low dilution ratios of make-up solution to copper-containing solution 230 are used.

The phrase “[a]lternatively, or in combination with the method described above” in paragraph [0039] refers to the pH adjustment process disclosed in the immediately preceding paragraph [0038]. The phrase “[a]lternatively, or in combination with” discloses that the dilution step may be combined with the pH adjustment step in either a serial or parallel manner. Accordingly, a process comprising both a dilution step and a chemical pH adjustment step, performed in series, is disclosed in the specification as filed. As exemplified in the Amendment to Figure 2B submitted herewith, Applicant submits that the Examiner’s rejections of claim 1 and claims 2-4 and 6-10, that depend from claim 1, are obviated. Accordingly, Applicant requests the withdrawal of these rejections and respectfully submits that claims 1-4 and 6-10 are allowable.

Claim Rejections under 35 U.S.C §102(b)

Claim 19

Claim 19 stands rejected under 35 U.S.C. 102(b) as being unpatentable over United States Patent No. 4,092,400 ("Zbranek") or United States Patent No. 4,444,733 ("Laferty"). More precisely, the Examiner directs Applicant's attention to Column 2, Lines 14-23 of Zbranek. Applicant respectfully traverses herein.

Both Zbranek and Laferty disclose a pressure leach performed under basic conditions. In contrast, Applicant claims the step of "pressure leaching a metal-bearing material" wherein the pressure leach "refers to a metal recovery process in which material is contacted with an acidic solution and oxygen under conditions of elevated temperature and pressure." (See Applicant's paragraph [0022].)

For example, Zbranek recites a pressure leach with a "caustic material," preferably sodium hydroxide. (See Column 3, Lines 15-16, 18-19.) Zbranek also recites potassium hydroxide and potassium carbonate as potential alternatives. (See Column 3, Lines 19-25.)

Like Zbranek, Laferty also teaches a basic pressure leaching step. (See Laferty Column 2, Line 21.) To further show the basic pressure leach, Laferty discloses the addition of sodium hydroxide to the pressure leach. (See Laferty Figure 1, which depicts "NaOH" with an arrow pointing into the box labeled "Pressure Leach.")

In contrast to both Zbranek and Laferty, Applicant claims the step of "pressure leaching a metal-bearing material" wherein the pressure leach "refers to a metal recovery process in which material is contacted with an acidic solution and oxygen under conditions of elevated temperature and pressure." (See Applicant's paragraph [0022].) Accordingly, the processes of Laferty and Zbranek are chemically different from the

process taught by the Applicant and, as such, Applicant requests withdrawal of these rejections and respectfully submits that claim 19 is allowable.

Claim Rejections under 35 U.S.C §103(a)

Claims 1-4 and 6-10

Claims 1-4 and 6-10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent 6,149,883 ("Ketcham") in light of United States Patent No. 3,357,821 ("Henrickson") and United States Patent No. 4,444,733 ("Laferty"). More precisely, the Examiner asserts that Ketcham suggests the instantly claimed process of pressure oxidation leaching of molybdenite and then diluting the leachate prior to solvent extracting the molybdenum therefrom. (See Columns 5-7.) The Examiner states that it would have been obvious to one skilled in the art to dilute the molybdenum leach liquor of Ketcham as taught by Henrickson because this facilitates ease of handling the solution. The Examiner then notes that Laferty teaches a chemical pH adjustment of a molybdenum leachate prior to solvent extraction. (See Laferty Column 2, Lines 10-40.) Applicant respectfully traverses herein.

Like Laferty, as described above, Ketcham teaches a pressure leach step under basic conditions. (See Ketcham Fig 1 and Fig 3.) Ketcham Fig 1 and Fig 3 both contain an "alkaline leach" step. Fig 3 depicts Lime or MgOH (both bases) entering the alkaline leach stage. Moreover, Henrickson does not appear to teach a pressure leach at all.

In contrast to both Ketcham and Laferty, Applicant claims the step of "pressure leaching a metal-bearing material" wherein the pressure leach "refers to a metal recovery process in which material is contacted with an acidic solution and oxygen under conditions of elevated temperature and pressure." (See Applicant's paragraph [0022].)

Applicant submits that the processes of Laferty and Ketcham are chemically different from the process taught by the Applicant. Thus, the combination of Ketcham in light of Henrickson and Laferty fail to teach, motivate, or suggest each and every element of the Applicant's claimed process. Accordingly, Applicant requests withdrawal of this rejection and respectfully submits that claims 1-4 and 6-10 are allowable.

CONCLUSION

For the foregoing reasons and upon entry of the Amendments set forth above, Applicant respectfully submits that all rejections have been obviated, that all rejections should be withdrawn, and that the application and claims are now in condition for allowance.

Should the Examiner have any questions or concerns with respect to this submission or the application in general, he is invited to contact the undersigned attorney at the telephone number listed below.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account No. 19-2814. **This statement does NOT authorize charge of the issue fee.**

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